

**Appl. No.** : **09/287,573**  
**Filed** : **April 6, 1999**

#### **AMENDMENTS TO THE DRAWINGS**

Please replace each the originally-filed drawings sheets with the attached, correspondingly-labeled, replacement drawing sheets "Replacement Sheets."

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### REMARKS

Applicants amend the application as follows: (1) Applicants provide formal drawings herewith on replacement sheets; (2) Applicants amend the specification to reintroduce the priority claim that was included in the originally-filed specification but inadvertently omitted from the substitute specification mailed October 31, 2001 and stamped as received by OIPE on December 6, 2001, to add a statement indicating that the invention was made with government support, to correct inadvertent mislabeling of figures, to provide SEQ ID NOs. to sequences contained in the application and to correct minor typographical errors; and (3) Applicants amend the specification to include a Sequence Listing which is being filed herewith. Applicants respectfully submit that all amendments to the specification and drawings reflect changes that are fully supported by the application as filed. **Accordingly, no new matter has been added to the instant application.**

### THE DRAWINGS

Formal replacement drawings are provided to replace informal drawings provided at the time of filing the original application. Applicants wish to draw the Examiner's attention to the fact that originally-filed Figure 21 was inadvertently mislabeled as Figure 22, and originally-filed Figure 22 was mislabeled as Figure 21. A review of the section entitled "Brief Description of the Drawings" reveals the mislabeling. In particular, the subject matter displayed in originally-filed Figure 21 is described in the "Brief Description" of Figure 22, whereas the subject matter displayed in originally-filed Figure 22 is described in the "Brief Description" of Figure 21. To rectify this inadvertent error, Figure 21 is re-labeled Figure 22 and Figure 22 is re-labeled Figure 21 in the set of replacement drawings ("Replacement Sheets") provided herewith. Additionally, citations to Figures 21 and 22 in the specification, have been corrected accordingly.

With respect to replacement Figure 21, SEQ ID NOs. have been added to identify the nucleotide sequences displayed therein. **None of the amendments to the drawings add new matter to the instant application.**

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#### THE SEQUENCE LISTING

Applicants provide herewith both a paper copy and computer readable form (CRF) copy of the Sequence Listing. Applicants respectfully submit that the Sequence Listing is fully supported by the specification as originally filed on April 6, 1999. The information recorded in computer readable form is identical to the Sequence Listing submitted herewith on paper. **Accordingly, entry of the Sequence Listing adds no new matter to the instant application.**

#### THE SPECIFICATION

Applicants provide herewith a substitute specification under 37 C.F.R. § 1.125. In accordance with these rules, both a clean copy of the specification and a marked up copy of the specification, which shows all the changes relative to the immediate prior version of the specification, are being provided herewith. **The substitute specification contains no new matter.**

Each of the changes that have been made to the specification is described below. All specific recitations of page and line numbers are made with reference to the marked-up copy of the substitute specification provided herewith.

1) At page 1, immediately after the title of the application, the following sections have been added.

#### RELATED APPLICATIONS

This application is a continuation-in-part application of copending U.S. application U.S.S.N. 08/944,850, filed October 6, 1997 and PCT application PCT/US98/21193 filed October 6, 1998, the text of which applications is expressly incorporated by reference herein.

#### STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH

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This invention was made with government support under N00014-94-0312 awarded by the Department of the Navy, Office of Naval Research. The government may have certain rights in the invention.

2) The phrase "Table 1" has been deleted from the paragraph appearing at page 11, lines 17-19.

3) The phrase "Table 2" has been deleted from the paragraph appearing at page 11, lines 21-25.

4) The phrase "Table 3" has been deleted from the paragraph appearing at page 11, lines 27-31. Also, the phrase "Table 1" has been replaced with the phrase "Figure 21" in the paragraph appearing at page 11, lines 27-31.

5) The phrase "Table 4" has been deleted from the paragraph appearing at page 12, lines 2-3.

6) The phrase "Fig. 25 depicts" has been replaced with the phrase "Figs. 25A-G depict" in the paragraph appearing at page 12, lines 5-6.

7) The term "30C" has been replaced with "30°C" and the term "60C" has been replaced with "60°C" in the paragraph bridging pages 31 and 32.

8) Table V, which bridges pages 45 and 46, has been amended to include a SEQ ID NO: for each of the nucleotide sequences listed therein.

9) The term "uL" has been replaced with "μL" in the paragraphs appearing at page 62, lines 21-26; page 62, lines 28-31 and page 63, lines 1-9.

10) The term "um" has been replaced with "μm" in the paragraph bridging pages 63 and 64.

11) The term "uL" has been replaced with "μL" in the paragraph appearing at page 64, lines 6-21.

12) The terms "um" and "uL" have been replaced with "μm" and "μL," respectively, in the paragraph bridging pages 64 and 65.

13) The term "um" has been replaced with "μm" in the paragraph appearing at page 65, lines 7 to 18.

14) The phrase "Table 1" has been replaced with the phrase "Figure 21" in the paragraph appearing at page 71, lines 18-21.

15) A SEQ ID NO. has been added to the nucleotide sequence in the paragraph appearing at page 76, lines 13-22.

16) The phrase "Table 1, see figure 22" is replaced with the phrase "Figure 21" in the paragraph appearing at page 77, lines 16-28. Also, in this paragraph, the phrase "Table 2 (Figure. 23)" is replaced with the phrase "Figure 22."

17) The phrase "(Table 1)" is replaced with the phrase "Figure 21" in the paragraph appearing at page 78, lines 6-13. Also, in this paragraph, the phrase "(Table 3)" is replaced with the phrase "(Figure 23)."

18) The phrase "Table 5" is replaced with the phrase "Figure 24" in the paragraph appearing at page 79, lines 6-22.

19) The phrase "Table 4" is replaced with the phrase "Figure 24" in the paragraph appearing at page 80, lines 1-6.

20) The phrase "Table 3" is replaced with the phrase "Figure 23" in the paragraph appearing at page 80, lines 8-13.

21) The phrase "(Table 1)" has been deleted from the paragraph appearing at page 81, lines 4-21.

Explanation of amendments to include "Related Applications" and "Statement of Federally Sponsored Research"

Applicants have reintroduced the priority claim into the substitute specification filed herewith. This priority claim is identical to the priority claim appearing in the originally-filed specification, but which appears to be inadvertently omitted from the substitute specification mailed October 31, 2001, which is stamped as received by OIPE on December 6, 2001, and which is stamped as received by Tech Center 1600/2900 on December 10, 2001. Additionally, Applicants have introduced a statement of federally sponsored research into the substitute specification filed herewith. Although this statement of federally sponsored research was provided in a supplemental amendment mailed November 15, 2001, which is stamped as received by OIPE on February 7, 2002, and which is stamped as received by Tech Center 1600/2900 on February 13, 2002, it does not appear to have been acknowledged as entered by the Examiner in subsequent Office Actions.

Explanation of amendments replacing citations to Tables with citations to Figures

Previously, Figures 21 – 24 were cited in the specification as Tables 1 – 4, respectively. The label "Table" was provided to each of these figures in the section entitled, "Brief Description of Drawings" in the specification as originally filed. It should be noted, however, that the text of the specification contains five distinct and additional Tables labeled I, II, III, IV and V. In order to resolve any potential confusion, Applicants have amended the specification to replace all

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citations to Tables 1 – 4 with citations to corresponding Figures 21 – 24. Thus, for example, a previous reference to Table 1 has been amended to refer to Figure 21.

Explanation of amendments regarding nucleotide sequences

Applicants would also like to point out that the application as originally filed includes nucleic acid sequences more than 10 nucleotides in length. These sequences were not originally assigned a SEQ ID NO. Furthermore, it appears that a Sequence Listing may not have been filed with this application. Applicants have therefore prepared a Sequence Listing and amended the specification to identify sequences with their corresponding SEQ ID NOs.

Explanation of other amendments to the specification

Lastly, Applicants have amended minor typographical errors in the specification, for example, replacing 'u' where the 'μ' symbol.

Applicants respectfully submit that no new matter has been added by any of the above amendments made to the specification or figures, and all amendments correct inadvertent mistakes only.

**CONCLUSION**

Applicants believe that all outstanding issues in this case have been resolved and that the present claims are in condition for allowance. Nevertheless, if any undeveloped issues remain or if any issues require clarification, the Examiner is invited to contact the undersigned at the telephone number provided below in order to expedite the resolution of such issues.


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Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: November 15, 2007

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